WORLD NEWS & ANALYSIS

Seen&Heard

MS&T is taking a new approach toward keeping you informed. We are examining a few key items in more depth in the first section, and closing out our look at the News with a broader sweep of items we deem of interest in our short notes.

EXAMINING THE NEWS

In this section of the News *MS&T* takes a more in-depth look at the new OneSAF release, the US Navy's Military Flight Operations Quality Assurance (MFOQA) demonstration project, and Venezuelan Air Force upgrades.

New OneSAF Release

The release of the One Semi-Automated Forces (OneSAF) Objective System (OOS) software version 1.0 late last year by the US Army's Program Executive Office for Simulation, Training and Instrumentation (PEO STRI) is a major step towards the US military's goal of common, open-architecture and open-source simulation software for its training systems. The OneSAF initiative is a part of the US military's resolve to eliminate the use of expensive proprietary software in training systems that sometimes has prevented them from working with each other and to prevent the duplication of software development efforts throughout the services. The effort has focused on the Linux-like, open-source software approach.

OneSAF is a software development tool used to model computer-generated forces (CGF) in scenarios generated by simulation-based training and other simulation systems. While the Army will be a major user of this tool, now that it has been released it is expected that other US military services, as well as industry and academia, will make use of it. A key element is that OneSAF will standardize CGF software so that it can "play" in a multitude of different training systems and provide common entity databases.

OneSAF is an entity-level tool. It can be used to model such things as individual combatants or vehicles in a training system scenario and their actions, as opposed to groups of such entities as with some current tools. It can also model the physical environment, such as terrain features and weather, in the scenario, and the resultant behavioral effects these factors can have on the battlefield and its combatants. Many other entity representations are within the capabilities of the OneSAF Objective System simulation tools as well.

"This (release) is a very special occasion, one that has been a long time in the making," said Dr. James Blake, Program Executive Officer for PEO STRI. "We now have a single solution to support all of the Army's modeling and simulation domains."

A key Army OOS application will be in embedded training initiatives. The most important of these is the Future Combat System (FCS), where embedded training is a requirement for all of the many manned and unmanned FCS combat and support elements.

"Not only will OOS be the central element of the Army's embedded training efforts, it will also aid our sister services in their modeling and simulation activities, advance Army and Department of Defense training transformation initiatives, and improve value, quality and responsiveness to our primary customer, the warfighter," Blake said.

Lt. Col. Rob Rasch, PEO STRI Product Manager for OneSAF, said that the OOS would become a common training component on every FCS embedded training platform. It will also provide simulation software tools for the Army Training Exercise and Military Operations (TEMO), Research, Development and Acquisition (RDA) and Advanced Concepts and Requirements (ACR) domains, he pointed out.

These applications of OneSAF could greatly multiply its importance to the Army. The TEMO domain uses M&S to train Army forces through live, virtual and constructive simulations. The RDA domain works to employ modeling and simulation for acquisition analyses of training concepts and initiatives that concentrate on equipping and supporting both fielded and future forces. The ACR domain uses M&S for experimentation and analyses on Army doctrine and force-related concepts.

The OneSAF program has won numerous awards, including a Department of Defense Top 5 Software Projects award for 2004 and 2005. In 2006, the OneSAF IPT competed for that year's Florida Governor's Award for Modeling and Simulation award.

Enbedded training will be required for all of the manned and unmanned FCS elements - including the Command and Control Vehicle (C2V).
Image credit: US Army

US Navy Flight Operations Quality Assurance Demonstration Project

In August of this year, the "Bats" of Marine All-Weather Fighter-Attack Squadron 242 – VMFA(AW)-242 – deployed to Iraq with prototype software tools developed under the Department of the Navy's Military Flight Operations Quality Assurance (MFOQA) demonstration project.

The tools include FlightAnalyst and FlightViz, modified commercial off-the-shelf software programs developed by SimAuthor, Inc., as well as a separate software tool developed by the Navy. Major "Drowsy" Reed, Director of Safety and Standardization for VMFA(AW)-242 said several squadron members were convinced of the value of the MFOQA demonstration prototype tools, and described them as a "force multiplier" during the unit's preparation for deployment.

The SimAuthor tools provide an analytical presentation of a flight based on operational data from the aircraft, a graphical and animated representation of a flight, and a post-flight replay of aircraft systems data in a format